

The Source of Security

5 Data Sources All Analysts Should Consider



Underwritten by

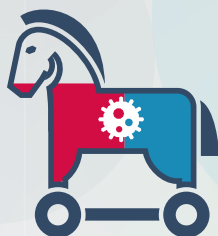


Government cyberattacks are on the rise...



Governments were the **NUMBER ONE** most preferred target for cyber attackers in 2014¹

Federal agencies reported nearly **70,000** information security incidents in **FY 2014** – up 15% from **FY 2013**²



Over **95%** of agencies have at least 10 malicious infections bypass security mechanisms each week –

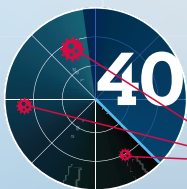


80% experience more than 100 new infections each week³

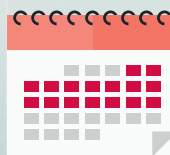
Since 2006, there have been more than **87 million** sensitive or private records exposed by breaches of Federal networks⁴



...but the majority of threats aren't even on the radar...



40% of government breaches go undetected⁵

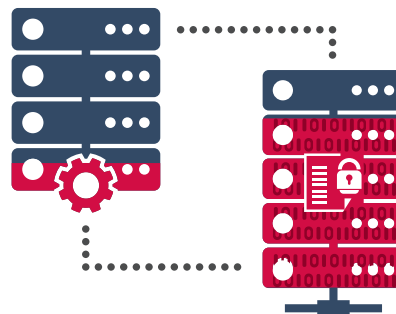


Cyber threats go undetected for an average of **16 days** on government networks⁶

The Worst Part...?

Many of these attacks could be mitigated if the right data was analyzed

Organizations only analyze **12%** of their data⁷



78% say at least some of their security data goes unanalyzed due to a lack of time and or skill⁸

It's time for agencies to uncover the threats hiding in the shadows.

¹ <http://hackmageddon.com/category/security/cyber-attacks-statistics/> | ² https://www.whitehouse.gov/sites/default/files/omb/assets/egov_docs/final_fy14_fisma_report_02_27_2015.pdf | ³ <http://www.chippewa.ca/wp-content/uploads/2013/09/Cyber-Attacks-on-Government-White-Paper.pdf> | ⁴ http://www.huffingtonpost.com/2014/11/10/cyberattack-government-computers_n_6131134.html | ⁵ <http://freebeacon.com/national-security/report-4-in-10-government-security-breaches-go-undetected/> | ⁶ www.meritalk.com/go-big-security | ⁷ <http://go.centurylinktechnology.com/2014ForresterBigDataWhitepaperPage> | ⁸ www.meritalk.com/go-big-security

Data for Defense: The TOP 5 Security Data Sources All Analysts Need to Consider

Security data analysis helps agencies effectively prevent and remediate cyber threats. However, key data sources are often neglected.

1

Proxy Logs

- **Reality:** 73% of browser-based attacks are from anonymizer proxy websites⁹
- **Importance:** See where and how the attacker moved and communicated within an infected host
- **Benefit:** Uncover Web-based attacks, browser attacks, injections, session hijacking, and data exfiltration. Source for pre-compromise and post-compromise analysis

2

Virtual Private Network (VPN) Logs

- **Reality:** Majority of attackers look for remote access to infiltrate a network
- **Importance:** See what deploys, where it comes from, and what IP addresses communicate with networks. View who is remotely logged into an environment on a day-to-day basis
- **Benefit:** Expose Advanced Persistent Threats (APTs)

3

Vulnerability Scan Data

- **Reality:** From 2013-2014, the number of security vulnerabilities rose by 46%¹⁰
- **Importance:** Identify which host on your network is the most vulnerable, import data about assets, vulnerabilities, and patches
- **Benefit:** Discover APTs

4

Dynamic Host Configuration Protocol (DHCP) Logs

- **Reality:** Attackers need a DHCP lease to access a Wi-Fi network
- **Importance:** Monitor systems assigned to IP addresses – identify which IP addresses were used, and for how long
- **Benefit:** Reveal network-based attacks. Potential post-compromise analysis

5

Mail Logs

- **Reality:** 69% of all security incidents reported to US-CERT in 2013 were attributed to phishing¹¹
- **Importance:** Review inbound/outbound mail for malicious links, unauthorized files, and bad attachments
- **Benefit:** Identify APTs

Situational Awareness: The Full Picture

Threats come from all angles. To see the full picture, start at the source – security data analysis helps provide a comprehensive view of threat risk and activity.

- Detect, mitigate, respond to, and predict cyberattacks
- Correlate threat attacks and malicious activity both internally and externally
- Create situational awareness of advanced threats



Listen To Your Data – Learn More

ALL DATA IS SECURITY RELEVANT

To learn how your agency can use big data to improve security outcomes, visit

<http://www.splunk.com/cybersecurity>



For more information, please call **1.866.GET.SPLUNK**, email fed_sales@splunk.com, or visit www.splunk.com/publicsector.

⁹ http://www.continue.uottawa.ca/uploads/File/Symantec_Cyber_Report_2014.pdf | ¹⁰ <http://www.gfi.com/blog/most-vulnerable-operating-systems-and-applications-in-2014/> | ¹¹ <http://archive.federaltimes.com/article/20141024/CYBER/310240013/-Spear-phishing-tactics-becoming-more-sophisticated>